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| 09/295,431      | 04/20/1999  | TETSUZO YOSHIMURA    | 6136/53461          | 7173             |

7590

06/04/2003

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San Francisco, CA 94109

EXAMINER

MOONEY, MICHAEL P

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/295,431

Applicant(s)

YOSHIMURA ET AL.

Examiner

Michael P. Mooney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Amdt. C filed 3/28/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) 19-40 and 49 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18 and 45-48 is/are allowed.
- 6) ☒ Claim(s) 41 is/are rejected.
- 7) ☒ Claim(s) 42-44 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

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The Office acknowledges the election of claims 1-48 without traverse and the subsequent cancellation of claims 19-40 in response to prior Office action(s).

Thus claims 1-18 and 41-48 are pending.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horimai (5323373).**

Horimai does not expressly teach an electrooptic (EO) module comprising :  
at least one substrate, wherein each substrate is selected from a group consisting of substrates with passive polymer waveguides, substrates with electrooptic elements embedded in a polymer film, substrates having embedded electrical elements,

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and substrates having passive polymer waveguides and embedded electrical and electro-optic elements.

Horimai does, however, teach (at, i.e., fig. 3) an optical pickup device which includes laser diode and PIN photodiode components. It would have been obvious for one of ordinary skill in the art at the time the invention was made to teach an electrooptic module comprising:

at least one substrate, wherein each substrate is selected from a group consisting of substrates with passive polymer waveguides, substrates with electrooptic elements embedded in a polymer film, substrates having embedded electrical elements, and substrates having passive polymer waveguides and embedded electrical and electro-optic elements because it is notoriously well known that a laser diode and PIN diode each have a substrate and layers of elements with electrical properties, i.e., electrical elements, of which at least some of said electrical elements are embedded.

Horimai does not expressly teach:

a 1<sup>st</sup> electric circuit terminal (ECT) disposed on one of the substrates, said first electrical circuit terminal coupled to a 1<sup>st</sup> integrated circuit chip (ICC) to receive electrical signals therefrom;

a 2<sup>nd</sup> ECT disposed on one of the substrates, said 2<sup>nd</sup> ECT coupled to a 2<sup>nd</sup> ICC to provide electrical signal thereto. It would, however, have been obvious to one of ordinary skill in the art at the time the invention was made for Horimai to expressly teach a 1<sup>st</sup> electric circuit terminal (ECT) disposed on one of the substrates, said first electrical

circuit terminal coupled to a 1<sup>st</sup> integrated circuit chip (ICC) to receive electrical signals therefrom; a 2<sup>nd</sup> ECT disposed on one of the substrates, said 2<sup>nd</sup> ECT coupled to a 2<sup>nd</sup> ICC to provide electrical signal thereto because it is notoriously well known (NWK) for the devices of Horimai to incorporate such arrangements.

Furthermore, Horimai does not expressly teach optical waveguide means in at least one of the substrates for propagating optical signals; optical signal source means in at least one of the substrates for generating optical signals in at least one of the substrates *according to the electrical signals received at said first electrical circuit terminal*; and [the italicized would have been obvious because it is NWK to do so]. It would have been obvious, however, for one of ordinary skill in the art at the time the invention was made to teach optical waveguide means in at least one of the substrates for propagating optical signals; optical signal source means in at least one of the substrates for generating optical signals in at least one of the substrates *according to the electrical signals received at said first electrical circuit terminal* because it is notoriously well known (NWK) that a laser diode has optical waveguide means in at least one of the substrates for propagating optical signals; optical signal source means in at least one of the substrates for generating optical signals in at least one of the substrates.

Furthermore, providing an optical detection means in at least one of the substrates for detecting optical signals and generating electrical signals therefrom which are coupled to the second electrical circuit terminal would have been obvious to one of

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ordinary skill in the art at the time the invention was made because it is NWK to do so for the purpose of, e.g., enhancing signal stability .

Thus claim 41 is rejected.

### ***Response to Arguments***

Applicant's arguments filed 3/28/03 have been fully considered but they are not persuasive with respect to claim 41. It is noted that Applicant did not fully and/or adequately respond to Examiner's notoriously-well-known (NWK) statements made in the prior Office action (paper no. 10). Since the NWK statements are true, the invention of claim 41 is rendered obvious as described above infra and/or in the prior Office action.

Furthermore, in the Response to claim 41, Applicant focuses on the fact that information in the Horimai device is communicated to and from a magneto-optic recording medium, not an integrated circuit chip. This focus, however, fails to address what goes on *within* the Horimai device in congruence with the NWK statements made in the prior Office action (paper no. 10).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Mooney whose telephone number is 703-308-6125. The examiner can normally be reached during weekdays, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 703-308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7721 for After Final communications.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-

0956. An alternative useful number for status inquiries is 703-306-3329.

  
Michael P. Mooney  
Examiner  
Art Unit 2877

  
Frank G. Font  
Supervisory Patent Examiner  
Art Unit 2877

FGF/mpm  
6/2/03